Welcome!

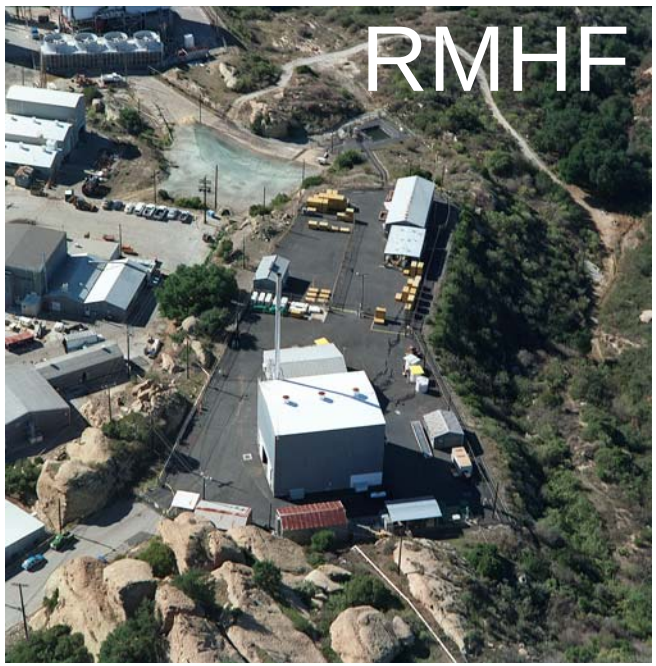
22 June 2005

Meeting Topics

- Remaining work to be completed
  - Building clean-up and demolition
  - Soil and groundwater investigation and remediation
- Update on the tritium in groundwater investigation
  - New wells installed
  - Probable source
- Historical Site Assessment
  - Recently released
  - Example of building 20, Hot Lab

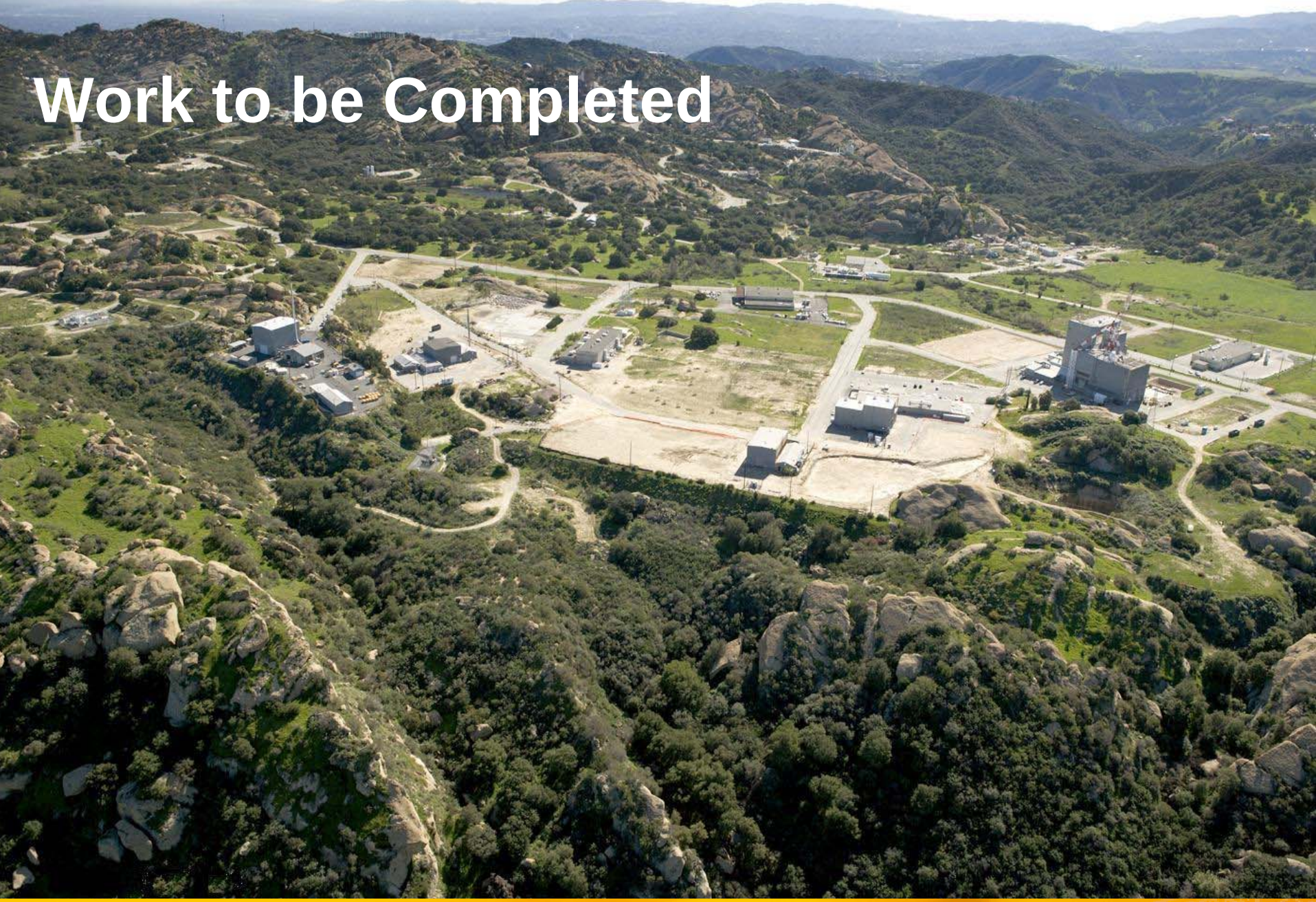
http://apps.em.doe.gov/etec

Work to be Completed



Well installation

Work to be Completed

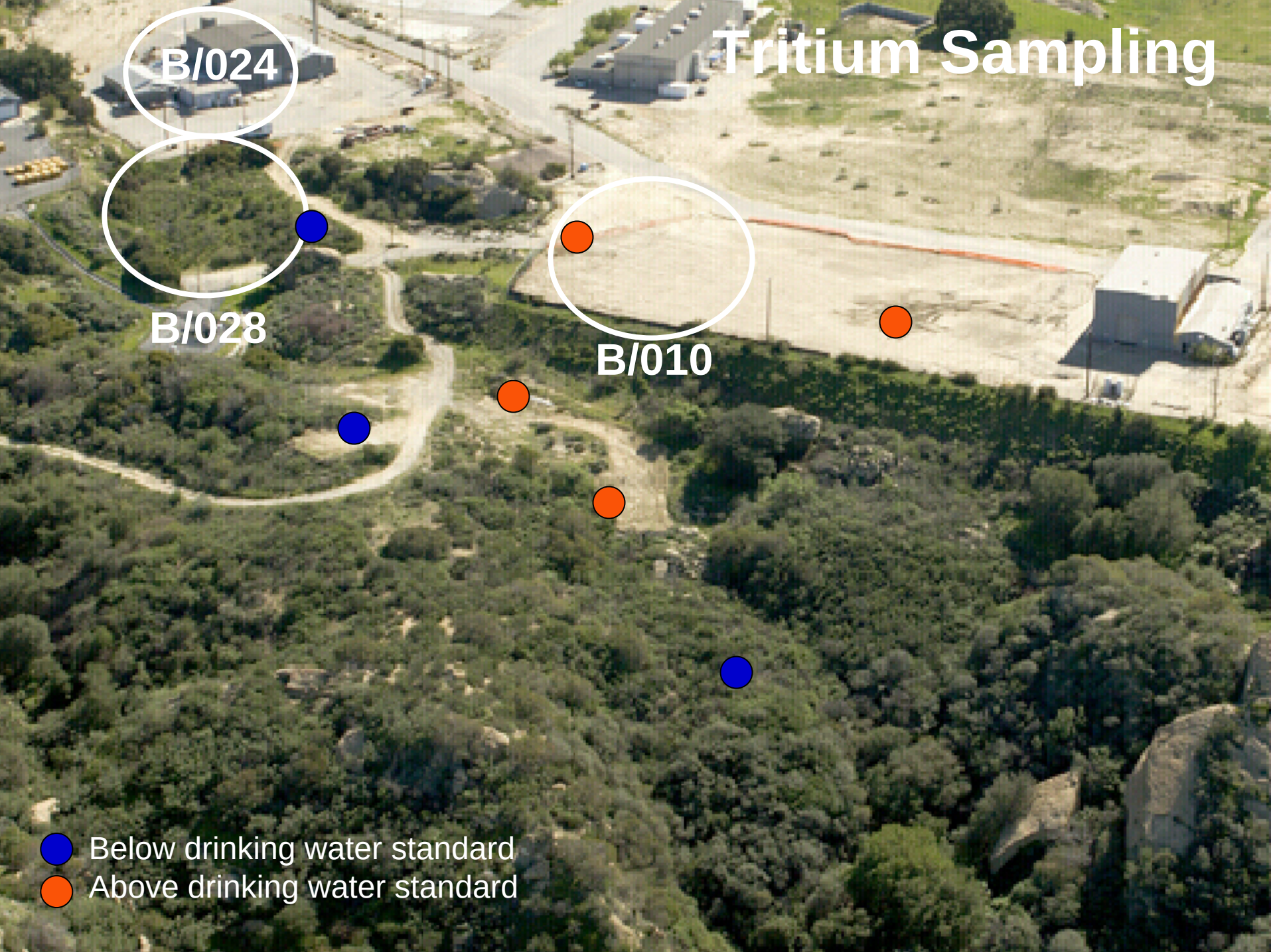


Area IV Tritium Investigation Update

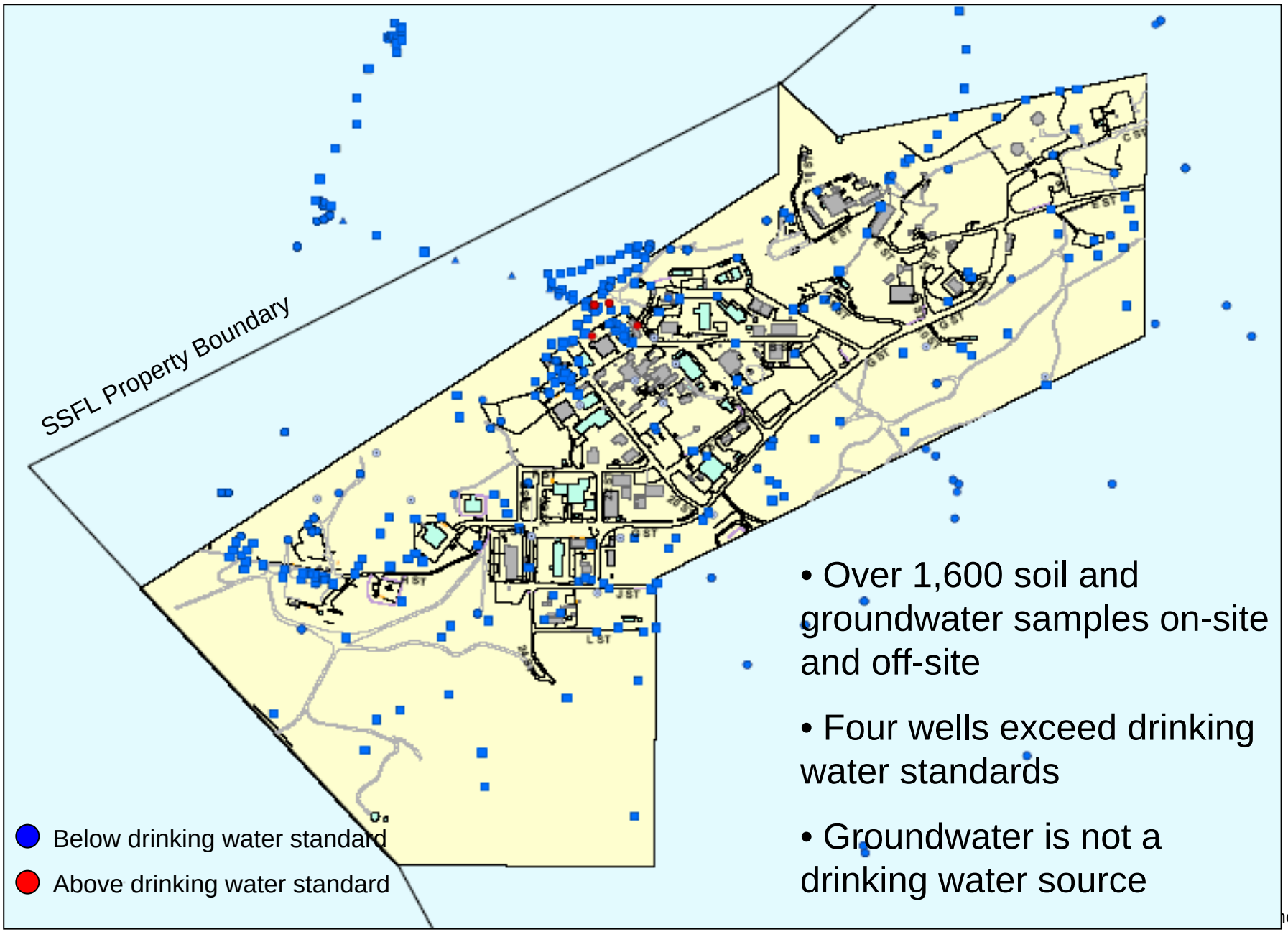
Installation of well RD-94


San Fernando Valley
Santa Susana
Simi Valley

Potential Sources of Tritium in Groundwater


Tritium Sampling
B/024
B/028
B/010
Below drinking water standard
Above drinking water standard

Soil and groundwater tritium sampling



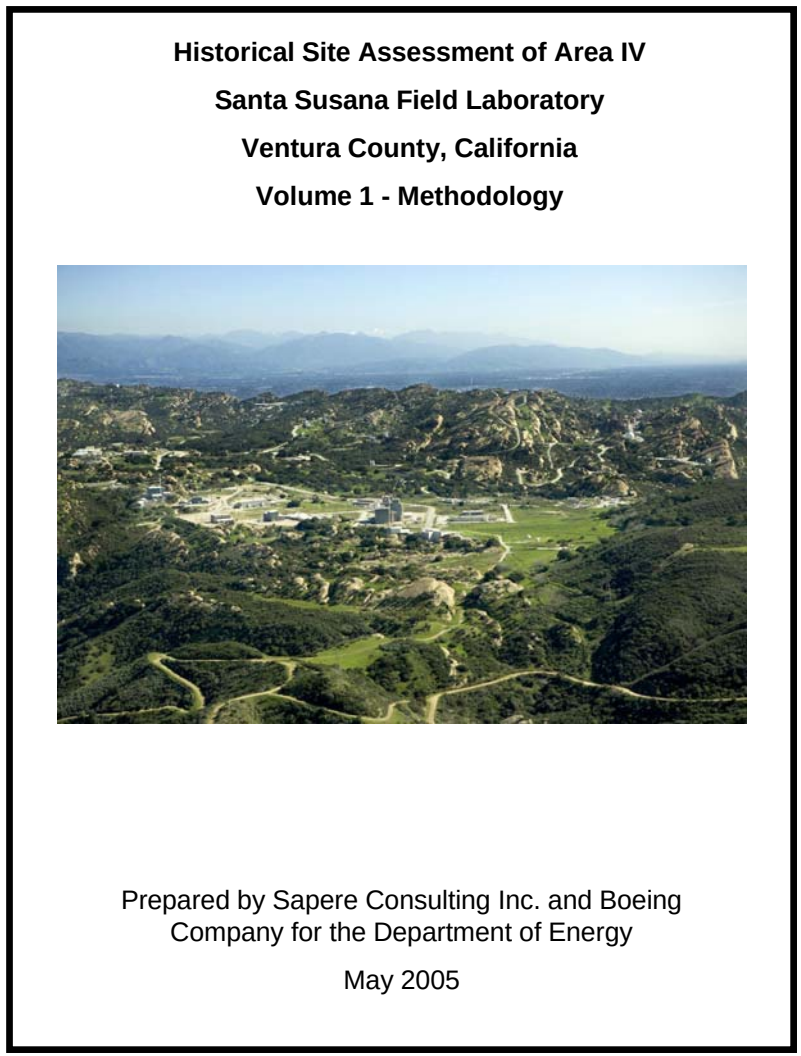
- Over 1,600 soil and groundwater samples on-site and off-site
- Four wells exceed drinking water standards
- Groundwater is not a drinking water source

Historical Site Assessment Volume 1 - Methodology

- 272 Sites classified based upon use of radiological materials
  - Impacted, radiological materials were used at the site
  - non-impacted
- 95 Impacted sites reviewed for current status
  - 70 sites previously released
  - 25 sites require additional work

Available at:

http://apps.em.doe.gov/etec/hsa.html



Historical Site Assessment
Volume 2 – Site Summaries

- Site Identification
- Operational Use History
- Site Description
- Relevant Site Information
- Radiological Surveys
- Status
- References
- Photographs

Figure 3-3. Example Site Summary

Site Summary – Site 4XXX

Site Identification:

- Any name used for the site (site purpose and association changed over time, resulting in several different names). Includes any additional support structures used to service the building not warranting an individual site summary (e.g., substations, guard shacks, time clock structures and construction shacks).

Operational Use/History:

- The date the site was constructed, programs the site supported, dates these programs were operating, deactivation/decontamination activities, and demolition date.

Site Description:

- A physical description of the site and any holding tanks or other below ground structures, leachfield, or air filter structure (stacks, HEPA filtration) associated with the site.

Relevant Site Information:

- Type of radiological material managed at the site, use authorizations, and any incidents that would have resulted in potential releases to the environment.

Radiological Surveys:

- Radiological surveys performed at the site, description of survey purpose (routine, characterization, final status, verification), date conducted, agency conducting the survey, survey scope (e.g., interior, exterior), measurements collected, acceptable limits for the survey, and survey results.

Status:

- Site release date and releasing agency (if applicable), and demolition date or current use.

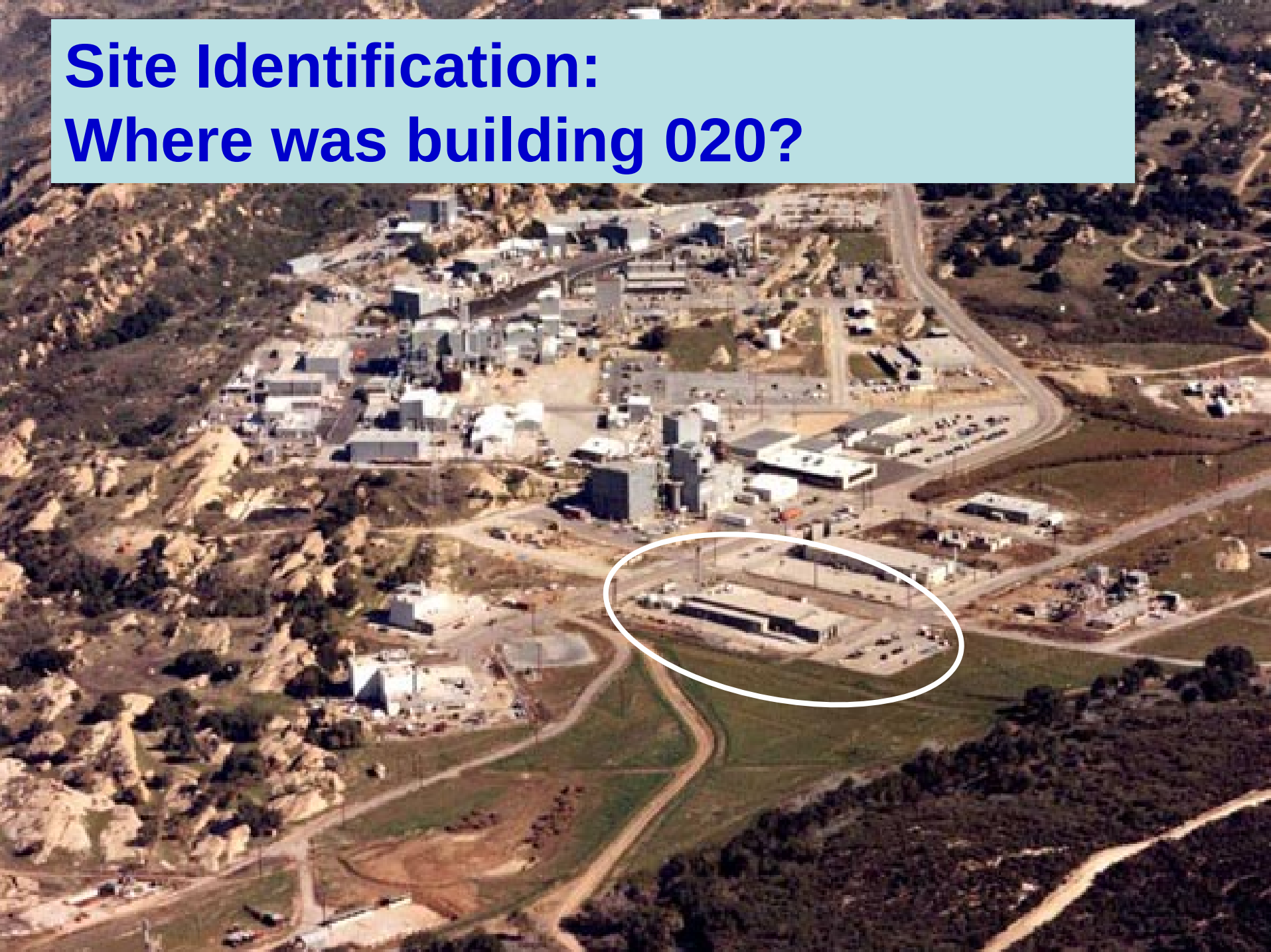
References:

- Documents, maps, photographs, personnel interviews, review of RSRMS, or any other information used to develop the site summary.

Photograph:

- If a photograph of the site was available, it was included in the site summary.

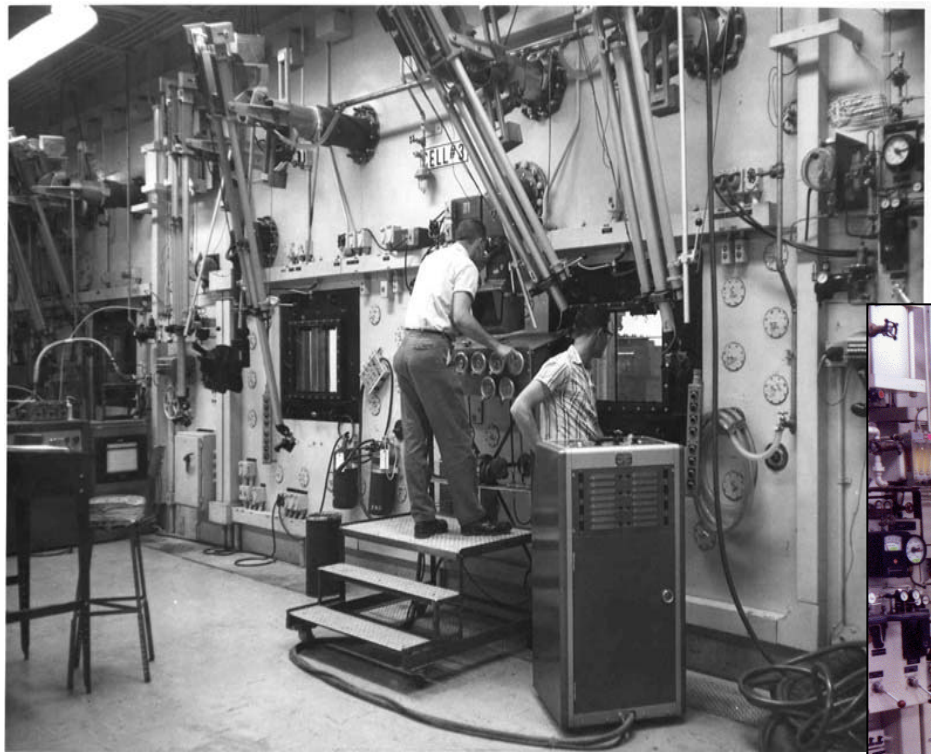
Site Identification:
Where was building 020?

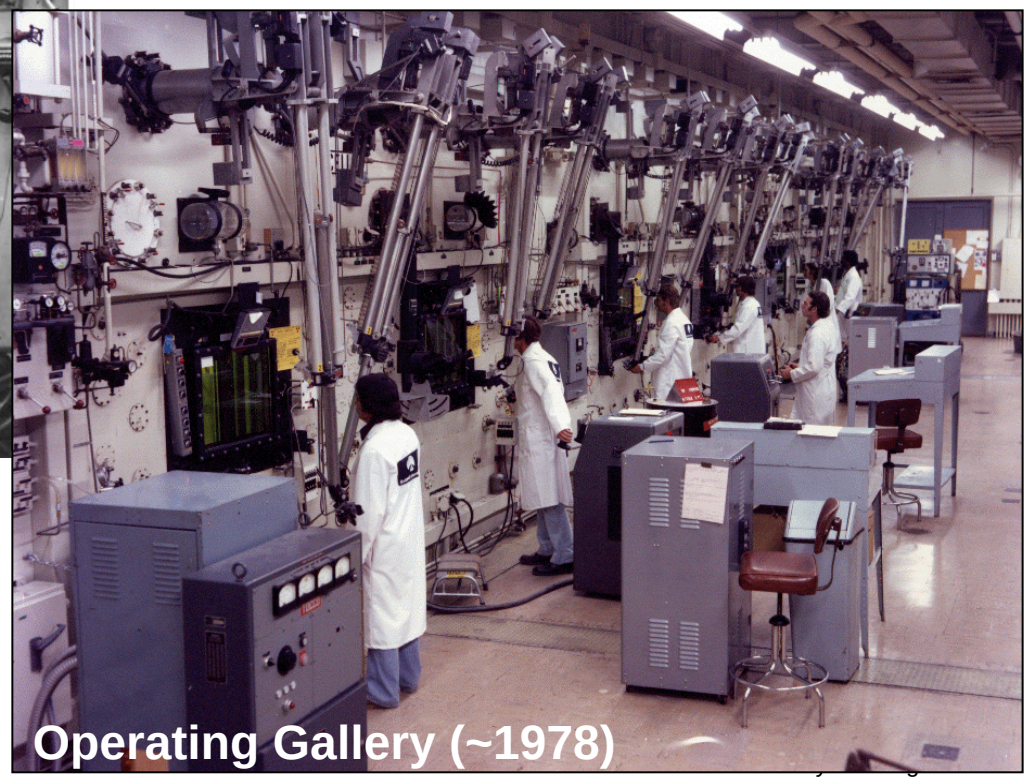


Site Identification:
What did building 020 look like?

Hot Lab looking North

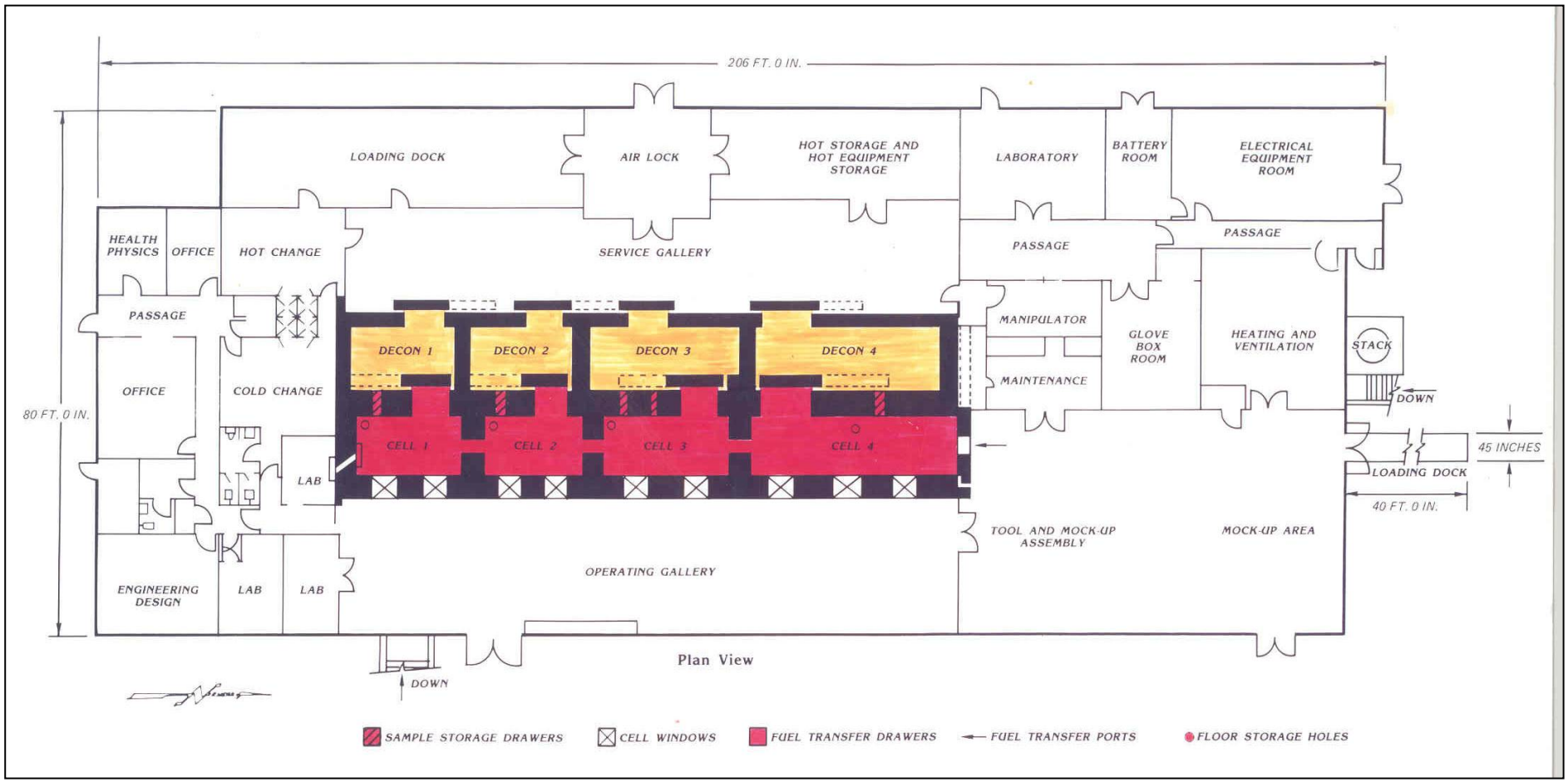
Operational Use History:
What was done at building 020?
What radiological material was used?





Operating Gallery (~1978)

Site Description:
What was building 020 like?
Was it designed to be protective?



Relevant Site Information: Did any unexpected things happen?

- 48 incidents between 1959 and 1993
- Considered the most serious incident was a fire in 1971:
  - A fire occurred during the disposal of 100 gallons of sodium/potassium liquid metal
    - nearly all contamination was contained to the Hot Cell
    - 2 to 20 percent of the allowable worker exposure level
    - About 5 percent of the permitted environmental concentrations were released from the stack

Relevant Site Information: What might be left over?

Radioactive materials handled in Hot Lab:

- Fuel Materials
  - uranium
  - thorium
  - plutonium
- Fission products including
  - cesium
  - strontium
- Activation products including cobalt

Radiological Surveys:
Were surveys completed? By whom?

Radiological Surveys: What were the results?

- Surveys have been completed by the California Department of Health Services (DHS), Oakridge Institute of Science and Education (ORISE), and Boeing

The site has been determined to be safe for unrestricted use

Status:
What does building 020 look like today?

Decontamination & Decomissioning (D&D):

Torch Cutting Steel Floor Liners

Drainline Removal

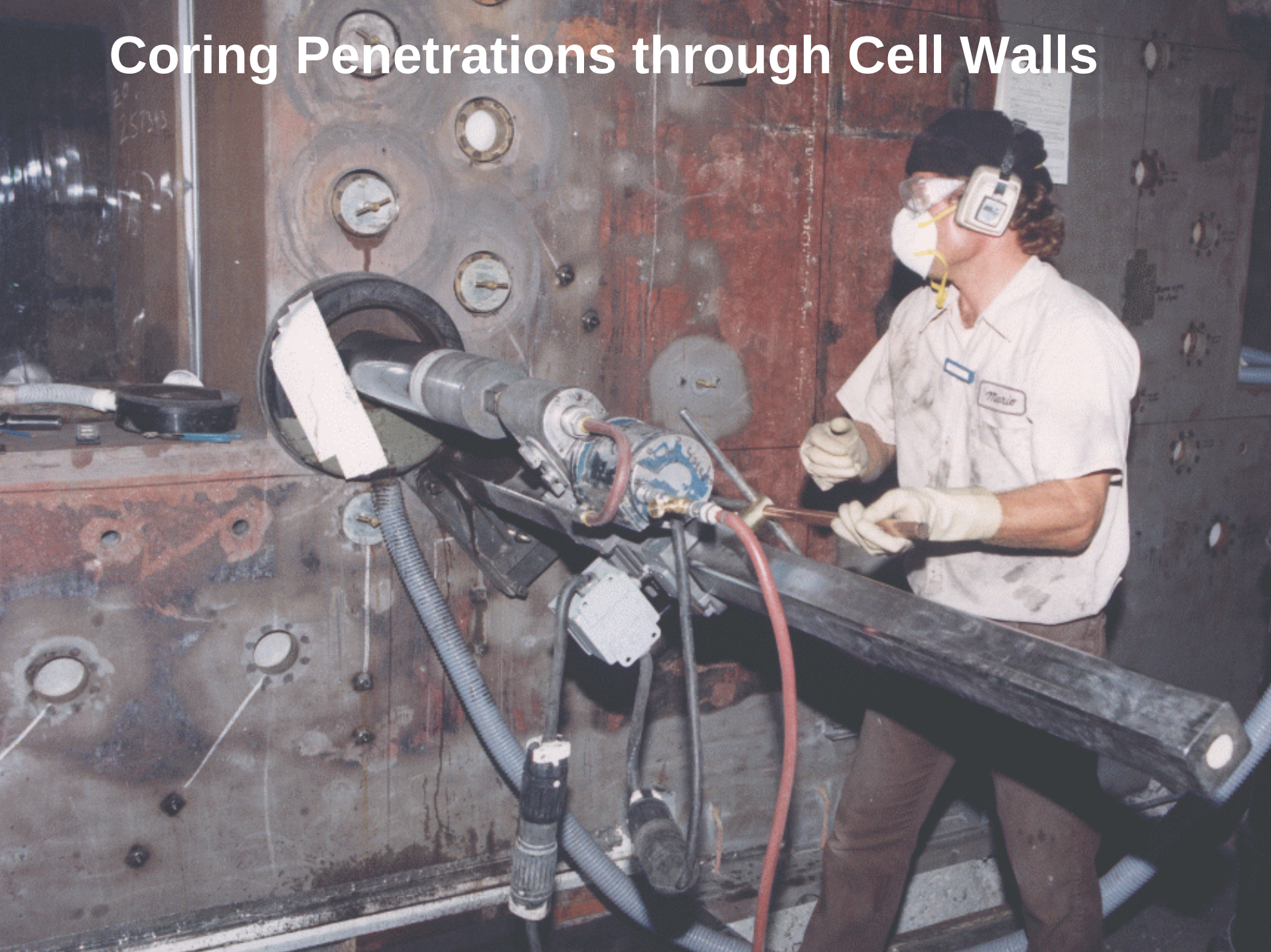
Concrete Removal Using Hydraulic Equipment

Packaging Radioactive Waste

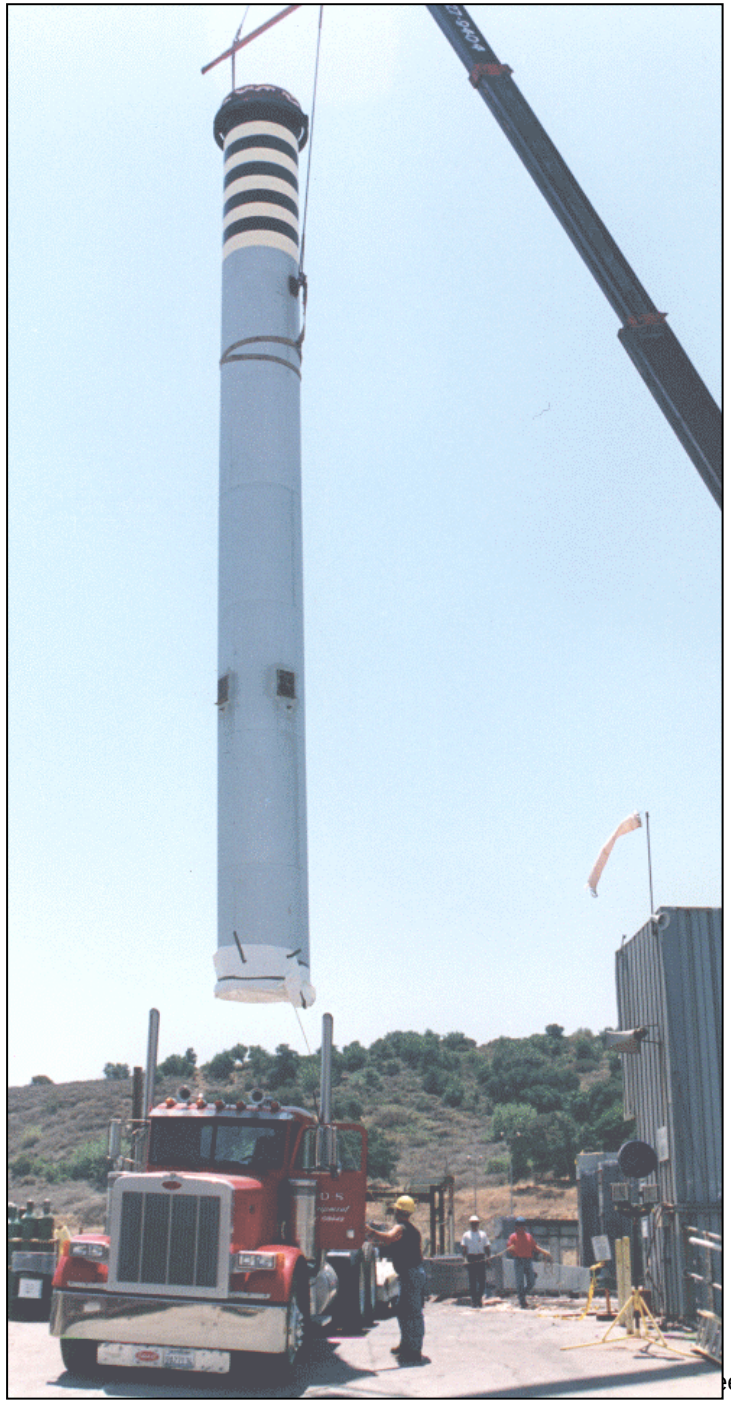
Coring Concrete Floor

Saw Cutting Concrete Cell Walls

Coring Penetrations through Cell Walls



Removal of Radioactive Liquid Storage Tank



Removal of Stack

Removal of Basement


Hot Lab Site Following Backfill
ETEC-1/19/99-395784


Hot Lab site today

Discussion

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AI Skywriter, 1960